

**PATENT APPLICATION**  
**AUTOMATED TRANSFER WITH STORED VALUE FUND**

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## AUTOMATED TRANSFER WITH STORED VALUE FUND

This application claims the benefit of both PCT Patent Application No. PCT/US01/22,179 filed on July 11, 2001 and U.S. Patent Application No. 09/613,615 filed on July 11, 2000.

### BACKGROUND OF THE INVENTION

The invention relates generally to stored value fund transactions, and more particularly relates to transferring money between parties with a network-accessible stored value fund.

One party may wish to transfer money to herself, a counter party, or vice versa, for any of a variety of reasons. Frequently, a payor party owes a debt to a payee party. The debt may be an informal IOU or a more formal transaction. Other times, the payor may wish to give the money to the payee as a gift. For example, the payee may have sold an auction item to the payor.

On-line services provide electronic transfers using a credit card or bank account. Money passes from a credit card or bank account of a first party to the on-line service where it is distributed to a credit card or bank account of a second party. Money may be held in the system during this process in a stored value fund. Manual interaction with the on-line service allows transfers of money to and from this stored value fund.

### BRIEF DESCRIPTION OF THE DRAWINGS

The present invention is described in conjunction with the appended figures:

FIG. 1 is a block diagram of an embodiment of an online money transfer system that is interfaced to a payor and payee;

FIG. 2 is a block diagram of another embodiment of an online money transfer system;

FIG. 3 is a block diagram of an embodiment of a payment enabler;

FIG. 4 is a block diagram of an embodiment of an agent location that includes an agent interface and kiosk interface;

FIG. 5A is a flow diagram of an embodiment of a process for transferring money to a number of payees;

FIG. 5B is a flow diagram of another embodiment of the process for transferring money to a number of payees that automates entry of transfer information;

FIG. 6A is a flow diagram of an embodiment of a process for transferring money that could include the payee receiving a negotiable instrument;

FIG. 6B is a flow diagram of another embodiment of the process for transferring money with the negotiable instrument where the payor uses an agent location;

FIG. 7 is a flow diagram of an embodiment of a process for configuring a user with an account for the online money transfer system;

FIG. 8 is a flow diagram of an embodiment of a process for transferring money from the payor to the payee;

FIGS. 9A and 9B are a flow diagram of an embodiment of a process for moving money out of a stored value fund for a user;

FIG. 10 is a flow diagram of an embodiment of a process for automating future transfers that uses the online money transfer system; and

FIGS. 11A and 11B are a flow diagram of an embodiment of a process for subscribing to automated transfers.

In the appended figures, similar components and/or features may have the same reference label. Further, various components of the same type may be distinguished by following the reference label by a dash and a second label that distinguishes among the similar components. If only the first reference label is used in the specification, the description is applicable to any one of the similar components having the same first reference label irrespective of the second reference label.

## DESCRIPTION OF THE SPECIFIC EMBODIMENTS

The ensuing description provides preferred exemplary embodiment(s) only, and is not intended to limit the scope, applicability or configuration of the invention. Rather, the ensuing description of the preferred exemplary embodiment(s) will provide those skilled in the art with an enabling description for implementing a preferred exemplary embodiment of the invention. It being understood that various changes may be made in the function and arrangement of elements without departing from the spirit and scope of the invention as set forth in the appended claims.

The present invention facilitates online money transfers in or out of a user's stored value fund. By accessing an online payment enabler through the Internet or other wide area network, users can configure automated transfers. The money is paid in

or out through money handlers such as credit/debit cards, banks, promotion programs, and agent locations. A period expiring and/or a threshold amount being met can cause the transfer of money in or out of the stored value fund. Multiple automated transfer processes can be configured to operate in parallel.

5 Money is transferred between the online money transfer system and the handler of the user's choosing. Money is a credit amount stored as a database entry corresponding to the user. The database entry corresponds to the stored value fund for that user that can be supplemented by transferring-in credit or reduced by transferring-out credit. The money or credit is transferred between users by updating the database entries  
10 for the users involved in the transfer. Money could be in any currency or be anything of monetary value, for example, airline mileage, promotional program points, gift certificate credit, commodities such as gold, etc.

Referring initially to FIG. 1, a block diagram of an embodiment of an online money transfer system 100 is shown interfaced to a payor 110 and payee 130 by  
15 way of the Internet 150 or a plain old phone system (POTS) 155. Although this embodiment shows users 100, 130 interfaced through the Internet 150 or the POTS 155, any other wide area network technology could be used. This embodiment demonstrates some interfaces to the payment enabler 170, but other interface arrangements are possible. The money transfer system 100 includes a payment enabler 170, a number of user  
20 interfaces 180 and a number of money handlers 160.

The payment enabler 170 controls the flow of credits throughout the system 100. Credit is received by the payment enabler 170 from the money handlers 160 where a payor or sender 110 transfers the credit to a payee or receiver 130. The credit is transferred by the payee 130 to a selected money handler 160. Presumably, the payee 130  
25 can retrieve and use the credit after it is transferred to the money handler 160.

Users 110, 130 and/or agents interact with the payment enabler 170 through user interfaces 180. These interfaces 180 are designed to couple different front ends to the payment enabler 170. In the depicted embodiment, there are three types of user interfaces 180. One interface supports Internet 150 connections to the payment  
30 enabler 170. Any number of devices could communicate by way of the Internet 150, but this embodiment uses computers 120 associated with the payor 110 and payee 130 to interact with the payment enabler 170. Another user interface 180 allows communication with telephones 140 over the POTS network 140. Yet another interface allows an agent

location 125 to communicate with the payment enabler. The agent could add and remove money from the payment enabler 170 under the direction of a payor 120 or payee 130.

The money handlers 160 are typically organizations that are used to pay for items or to store money, but often are difficult for the payor or payee 110, 130 to use when making payments. Examples of money handlers 160 include credit/debit cards, banks, promotion programs, and agent locations 125. In this embodiment, the agent location 125 serves as an interface to the payment enabler 170 as well as a money handler 160. Handlers 160 have established mechanisms for moving money that payors 110 and payees 130 are accustomed to using, such as, paying for items with a credit card and withdrawing money from a bank. However, payors 110 and payees 130 may have no way to accept credit cards or wire transfers.

With reference to FIG. 2, a block diagram of another embodiment of an online money transfer system 200 is shown without the payors 110 or payees 130. In this embodiment, five handlers 160 and five user interfaces 180 are shown. Other embodiments could have more or less handlers 160 and interfaces 180. Each of the handlers 160 allows a user to add and/or remove money from the payment enabler 170. Normally, the payee 130 can choose the handler 160, but in some circumstances, the payor 110 can choose the handler 160. The user interfaces 180 allow interaction with the payment enabler 170 to transfer funds.

The promotion handler 160-1 allows adding and removing money in a form other than legal tender or negotiable instrument. Examples include airline mileage programs and gift certificate programs. For example, a user could use money in their stored value fund to purchase airline miles with an airline mileage handler 160-1. A conversion rate would be applied to convert the money to mileage credit. The promotion handler 160-1 may need special information from the payment enabler 170, such as the user's promotion account number or type of gift certificate.

The credit and debit card handlers 160-2, 160-3 behave largely the same. Both can be used to add money into the payment enabler 170. In other embodiments, these handlers 160-2, 160-3 can also be used to remove money from the payment enabler 170 also. To use these handlers 160-2, 160-3, the payment enabler 170 stores the information for receiving money from credit or debit cards in the conventional way, such as the account number, expiration date, name, and/or PIN.

The bank handler 160-4 allows electronic funds transfer (EFT) of money to a bank account of the user. The user enters the account number and routing

information into the payment enabler 170 with a user interface 180 to facilitate adding and removing of money from the payment enabler with this handler 160-4. In one embodiment, an automated teller machine (ATM) could incorporate the bank handler 160-4 along with an ATM interface 180-1 to allow adding and removing funds along with  
5 interfacing with the payment enabler 170. Another embodiment uses a bank handler 160-4 branch location as an agent interface 180-4 for interacting with the payment enabler 170.

The agent handler 160-5 typically corresponds to an agent location 125 that may wire money, print money orders and/or cash checks. Money may be sent to the  
10 agent handler 160-5, whereafter the user receives cash or a negotiable instrument for that money. Money can be added to the system 100 by the agent handler also. For example, the user may give cash to the agent who enters a credit into the payment enabler. The user could further specify to the agent a payee to receive the money. An agent interface 180-4 at the agent location 125 is used by the agent to indicate to the payment enabler  
15 170 that the money has been received from or by the user. Through an agent handler 160-5 a user could use the online money transfer system 100 without any knowledge of computers or any debit/credit card or bank account.

As briefly discussed above, the ATM interface 180-1 allows interaction with the payment enabler 170. The user may or may not have an affiliation with the  
20 ATM that is used to interface with the payment enabler 170. Under this circumstance, the owner of the ATM may charge the user a fee for this service. The user can receive cash or deposit cash if the ATM is coupled to a bank handler 160-4. In any event, the ATM interface 180-1 can be used to interface with the payment enabler 170 in the same way a user may interact through a web browser with the payment enabler 170. If the ATM has a  
25 magnetic stripe or smart card reader, this could be used by to avoid entering credit or debit card information manually for the payment enabler 170.

A kiosk interface 180-2 allows a user to interact with the payment enabler, but typically does not allow adding or removing cash. The kiosk interface 180-2 may be a browser terminal available for general use. Some embodiments may include a check or  
30 money order printer for removing money from the system 100. The kiosk interface 180-2 could be in an agent location 125 and linked to the other systems in the agent location 125.

An Internet interface 180-3 is typically implemented through a web browser. The browser downloads web pages from the payment enabler 170. The Internet

interface could be hosted by the computer 120 of the user. Some embodiments could host the Internet interface on a portable device such as a wireless phone or personal digital assistant (PDA). The Internet interface 180-3 may also be used by the ATM, kiosk and agent interfaces 180-1, 180-2, 180-4 in whole or in part. The Internet interface 180-3  
5 uses encryption for the link to the payment enabler 170 in some embodiments.

The agent interface 180-4 allows for specialized interaction by an agent at the agent location 125. Agents typically have special training and offer enhanced services over most interfaces 180 and handlers 160. The agent can move money between payors 110 and payees 130 at the direction of the user. Also, the agent can pay-in and pay-out  
10 money from the transfer system 100. The agent interface 180-4 allows an agent to act on behalf of the user when manipulating the user's account. For security, the user's password or PIN may be entered during this manipulation.

Interaction with the payment enabler 170 may also be performed over a telephone 140 interfaced to the POTS 155. The phone interface 180-5 provides voice  
15 prompts and recognizes the user's touch-tone or speech recognized input. Enhanced interaction with the phone interface 180-5 could be provided with wireless phones having wireless access protocol (WAP) or browser graphical user interfaces (GUIs).

Referring next to FIG. 3, a block diagram of an embodiment of a payment enabler 170 is shown. The transfer of money between handlers 160, stored value funds and users 110, 130 is controlled by the payment enabler 170. The payment enabler 170  
20 may be implemented on one or more computers in one or more locations where the various computers communicate over a network. Included in the payment enabler 170 are a payment controller 304, handler interfaces 308, a billing function 312, a messaging function 316, an enabler interface 320, a user database 324, a payment conversion  
25 function 328, and an exchange rate database 332.

The payment controller 304 manages operation of the payment enabler 170. The handlers 160 and interfaces 180 along with user information and money conversion tasks are all choreographed by the payment controller 304. The payment controller 304 is interconnected to the other portions of the payment enabler 170 by one  
30 or more networks.

The payment conversion function 328 allows converting between disparate forms of money as it is transferred through the system 100. An exchange rate database 332 holds conversion factors that allow determining the proper weight to give one form of money. In a simple example, the payment conversion function 328 may convert money

in U.S. dollars to money in European Union Euros. In another example, a user may convert money into airline miles of eight miles for every dollar for a promotion handler 160-1. The exchange rate database 332 is updated with conversion rates as often as practical using conventional methods. The conversion rate may accommodate a percentage service fee for the exchange or a flat fee could be charged.

A billing function 312 monitors and charges for the services of the payment enabler 170. There may be charges when transferring money, converting money, printing and mailing negotiable instruments, using kiosks, ATMs or agent locations, etc. These charges are normally deducted from a transfer, but other embodiments could charge monthly fees. The different types of handlers 160 may have different fees associated with them. For example, a credit card may have a three percent charge, but a bank transfer may only have a one percent charge. The payor and/or the payee can be charged to transfer money between themselves. The transfer in or out of the system 100 may incur a separate charge. The billing function 312 may issue invoices for some users.

There are handler interfaces 308 to support the handlers 160. Each of these interfaces 308 may support a single handler 160 or a group of handlers. For example, a single interface may perform EFT to and from bank handlers 160. When money is sent to or received from a handler 160, the appropriate handler interface passes the money and transfer information to the payment controller. In some embodiments, the cost of the transfer to or from the handler is reported by the handler interface 308 such that the billing function can recover those costs.

Information for the users of the system 100 is stored in the user database 324. This information includes an address book of other users, money credit in the stored value fund, past money transfer information, account number, e-mail addresses, contact information, handler interface information, handler preference information, etc. The money credit is stored in a trust account for the benefit of the user according to the entry in the user database 324 corresponding to that user and interest may or may not be paid on that money credit.

The enabler interface 320 is used by the various interfaces 180 to interact with the user. The enabler interface 320 produces the form web pages and informational web pages to allow the user to create and maintain their account, transfer money and learn to use the system 100. The appropriate user interface 180 formats and processes the enabler interface information according to the device used to interface with the payment



enabler 170. For example, the Internet interface 180-3 takes the information from the enabler interface 320 and formats into hypertext mark-up language (HTML) appropriate for the computer 120 of the user.

A messaging function 316 is used with some configurations to notify the user of certain events. Requests for money are sent by the messaging function 316 along with acknowledgment and billing messages. These messages could be accessed using a web browser, an e-mail program, an instant messaging program, a pager, a WAP enabled device, etc. In some embodiments, the messaging function 316 may issue printed bills for users. The messaging function 316 is also used to communicate with agent locations 125.

With reference to FIG. 4, a block diagram of an embodiment of an agent location 125 is shown that includes an agent interface 180-4 and kiosk interface 180-2. Both interfaces 180-2, 180-4 are coupled to a wide area network 404 that is coupled to the payment enabler 170.

The kiosk interface 180-2 is primarily intended for users to interact with, and the agent interface 180-4 is primarily intended for agents to interact with. In some embodiments, both interfaces 180-2, 180-4 are used to perform a transfer. For example, the agent may use the agent interface 180-4 to perform the transfer while the kiosk interface 180-2 is used to monitor the agent's actions and enter a password or PIN that is kept secret from the agent. The kiosk interface 180-2 may also be used to perform a complete transfer in circumstances where the user is trained to use the system 100, but does not utilize other interfaces 180 for whatever reason.

The agent interface 180-4 and kiosk interface 180-2 can output a negotiable instrument with a printer 412. Examples of negotiable instruments include money orders, cashiers checks, tellers checks, certified checks, checks, gift certificates, coupons, etc. In some embodiments, each interface 180-2, 180-4 may have a separate printer. The printer 412 may also be used to print receipts and messages related to the transfer of money.

Money can be added to or removed from the system 100 at the agent location 125 with money distribution devices 408, 416, 420. In the conventional manner, cash can be received by the cash register, credit or debit cards and be debited by the card terminal 408, and checks can be confirmed with a check validation terminal 420. Cash can be paid out from the cash register 416 or added to a credit or debit card by the card terminal 408 in a conventional fashion. These money distribution devices 408, 416, 420

all interface with the system 100 by way of the agent interface 180-4 such that pay-outs and pay-ins can be automatically recorded by the payment enabler 170.

Referring next to FIG. 5A, a flow diagram of an embodiment of a process 500 for transferring money to a number of payees 130 is shown. In this embodiment, any number of payees 130 can receive money from a payor 110. The amount sent to each payee 130 can be the same or different. The target for the transfer can be a stored value fund or an external payout that goes strait to a handler 180 that prints a negotiable instrument for mailing or pick-up by the payee.

The depicted portion of the process begins in step 504 where the payor 110 logs in to the system 100 through the enabler interface 320 by way of the Internet interface 180-3. Under some circumstances, the payor 110 can avoid creating an account with the payment enabler 170 by acting as an external payor 110 in step 508. Avoiding account creation reduces the amount of information the payor 110 enters. Handler information for this external payor transfer is entered in step 516 and only used for this transfer and discarded when done. Some embodiments, may retain the handler information in case the payor 110 ever logs back into the system 100. If the payor 110 does not remain external to the system 100, an account is opened in step 512 when there is no existing account.

Regardless of whether the payor 110 is external to the system 100, the payor 110 enters the unique identifiers for the payees 130 in step 520. The unique identifiers in this embodiment are e-mail addresses of the payees 130, but could be any existing or new code that uniquely identifies the payee in other embodiments. Some embodiments may include an address book stored either locally or remotely with the payment enabler 170. The address book could include in a list the unique identifier for a single user or a group that includes the unique identifiers for the group of users. By selecting the group, all the included users become payees for the transfer. The group can further include the amount transferred last time to the users such that the amounts can be reused if they are the same for the new transfer.

In step 524, it is determined if the payor 110 wishes to send an equal amount of money to each payee 130 of the money transfer. The payor 110 either enters the one amount for all payees 130 in step 528 or enters a unique amount for each payee 130 in step 532. In any event, processing from steps 528 and 532 proceeds to step 536 where the specified money amount is transferred into each payees 130 stored value fund. At this point, the payment controller 304 communicates with the handler interface 308 to

receive the money into the system 100. The allocated amount is recorded into the user database for each payee 130, but the aggregate money is stored in a trust account.

In step 540, a determination is made as to whether the payout should be external to the system 100. Where an external payout is performed, the stored value fund used in step 536 can be a temporary fund that can be removed from the system after the payee 130 receives the money. In step 542, the payor 110 enters a delivery address for the payee 130. A message is sent to an agent location 125 with a negotiable instrument printer 412 that indicates a payee name, an amount and a delivery address. In step 544, the money order or other negotiable instrument is printed and sent to the address of the payee 130. Regular mail or courier services could be used to delivery the negotiable instrument.

Where an external payout is not selected in step 540, processing continues to step 548. In that step, a message is sent to the payees notifying them of the available money. This message may include instructions for new users to create an account. If the user has an existing account, the message could indicate the total cash in the account and/or promotional information. In step 552, the payees 130 log into the enabler interface 320.

A determination is made in step 556 as to whether each payee 130 has an existing account. Where there is no account, one is opened by the payee 130 in step 512. Once the payee 130 has an account, processing proceeds to step 560 where the payee 130 can move money out of her stored value fund.

In this embodiment, the payor can choose an external payout in step 540 such that the payee 130 need not have an account with the system 100. Other embodiments, could market a separate product where there is no option to send money to a permanent stored value fund of the payee 130 such that all payees 130 are external to the system and all payees 130 need not have an account with the system 100. In another embodiment, money could be transferred by the system 100 between the pay-in handler 160 and the pay-out handler 160 without a need for the payor 110 or payee 130 having a stored value fund to temporarily store the money. The pay-out handler 160-5 could be an agent location 125 that prints and sends a negotiable instrument after receiving the money directly from the payor's pay-in handler 160 under the direction of the payment enabler 170.

With reference to FIG. 5B, a flow diagram of another embodiment of the process 562 for transferring money to a number of payees 130 is shown that automates

entry of transfer information. The transfer information includes for each payee: the payee name, unique identifier or e-mail address, money amount, and message body and title. A format such as extensible markup language (XML) or other conventional format can be used for this transfer information. This embodiment allows automatically sending a file with transfer information or manually indicating the file. Other embodiments could allow cutting and pasting the transfer information.

Where automatic sending of the transfer information is used, processing begins in step 566 where the transfer information is formulated by a payor computer system. For example, the payor computer may process holiday bonuses for employees.

To pay the holiday bonuses, the payor computer could produce an XML file with the transfer information that is sent to the payment enabler 170 for distribution to the employees. In step 570, a secure connection is made between the payor computer and the payment enabler 170 using, for example, a secure sockets layer (SSL) session. Once a secure link is established, the file with the transfer information is sent in step 574.

In some circumstances, the payor 110 may manually specify a file that contains the transfer information. This alternative scenario begins in step 504 where the payor 110 logs into her account by way of the enabler interface 320. In step 582, the transfer information file is selected by the payor 110 specifying the URL or volume, path and file name. In step 584, the payor 110 begins the upload of the file using a secure connection such as SSL. A web page showing the transfer information is presented to the payor 110 in step 588 to allow verification of the information. Once the transfer information file is received, processing continues to step 536 in the same manner as that described in relation to FIG. 5A above.

Referring next FIG. 6A, a flow diagram of an embodiment of a process 600 for transferring money that could include the payee 130 receiving a negotiable instrument is shown. In this embodiment, a single transfer occurs between a payor 110 and a payee 130. For the external payout, the negotiable instrument can be mailed or held at the agent location 125 for pickup. Other embodiments could have multiple payees 130 where the negotiable instruments are optionally held at an agent location 125 for pickup.

This process 600 begins to notably differ from the embodiment of FIG. 5A in step 620 where a single identifier for a single payee 130 is entered. Continuing on to step 628, the payor 110 enters the transfer amount for the payee 130. The payment enabler 170 in step 536 gathers the money from the default handler 160 previously indicated by the payor 110. In step 640 the type of payout is chosen from: a payout to a

stored value fund, an external payout that is sent to the payee location, or an external payout that is made available for pickup. The latter two options are described in relation to FIG. 5A.

Where the external payout for pickup option is desired, processing continues to step 664 from step 640. Where an external payout is performed, the stored value fund used in step 536 can be a temporary fund that can be removed from the system after the payee 130 receives the money. In step 664, a message is made available to all agent locations 125 with a negotiable instrument printer 412 that indicates a payee name and an amount. When the payee 130 arrives at a chosen agent location 125, the agent can use the agent interface 180-4 to the payment enabler to verify the payee 130 is due payment. After verification of the identity, the negotiable instrument is printed for the payee 130 in step 668.

With reference to FIG. 6B, a flow diagram of another embodiment of the process 670 for transferring money with the negotiable instrument where the payor 110 uses an agent location 400 is shown. In this embodiment, the payor 110 remains external to the system 100 without the need for personally interfacing with the payment enabler 170. The depicted portion of the process begins in step 674 where the payor 110 provides money at an agent location 125. The money could be in the form of cash, a credit card or a check. In step 678, the agent enters an identifier for the payee 130, such as an e-mail address. In step 682, the agent enters a money amount for that payee 130. The agent interface 180-4 is used to enter the identifier and amount. The remainder of the process 670 is largely the same as the embodiment of FIG. 6A.

Some embodiments may avoid step 536 where a possibly-temporary stored value fund is created for the payee if the payee doesn't already have one in the case of an external payout as determined in step 640. The amount would go directly to the handler that prints the negotiable instrument for pick-up or mailing. Other embodiments may load the amount into a stored value fund of the payor before transferring that amount to the stored value fund of the payee.

Referring next to FIG. 7, a flow diagram of an embodiment of a process 512 for configuring a user with an account with the online money transfer system 100 is shown. Where the payee 130 or payor 110 is not external to the system, an account with the payment enabler 170 is created. The depicted portion of the process 512 begins in step 704 where the user 110, 130 enters an e-mail address as the unique identifier for the account. The user may want to enter any other e-mail addresses that may be used by

counter parties to a transaction. Other embodiments could use any unique identifier for the user.

Once an e-mail address is given to the payment enabler 170, it is verified. A message is sent to the e-mail address in step 708. A code is provided and an URL such  
5 that the user can click on the URL to load a page where the code is entered to verify the e-mail address. In this embodiment, the code is a randomly generated set of alphanumeric characters. Other embodiments could use any number of methods to verify the e-mail address.

The user enters contact information in step 712. This contact information  
10 could include address, phone number, pager address, instant message address, wireless phone address, contact e-mail address, etc. In step 716, the user enters handler interface information. For example, the user might enter credit card information and bank transfer information. In step 720, the information is verified with the handler 160 to the extent possible for that handler 160. In step 724, the process 512 can loop back to step 716 for  
15 entering and verifying additional handlers.

In step 728, a default input handler 160 and a default output handler 160 can be chosen for transferring money into and out of the system 100. These handlers 160 may be different. In step 732, the payment enabler 170 waits for verification at least one of the e-mail addresses before activating the account for sending and receiving money  
20 with that e-mail address in step 736.

With reference to FIG. 8, a flow diagram of an embodiment of a process 536 for transferring money from the payor 110 to the payee 130 is shown. The process 536 describes a transfer between a single payor 110 and a single payee 130, but a number of these processes 536 could be performed in parallel where there are a number of payees  
25 130. The depicted portion of the process begins in step 804 where the payee 130, payor 110 and amount are determined for the money transfer. In step 812, it is determined if the stored value fund of the payor 110 has enough money to fund the transfer to the payee 130.

Where there is not sufficient funds in the stored value fund, processing  
30 continues to step 816 to load funds. In step 816, the default pay-in handler 160 is determined. The information used to transfer money from the handler 160 into the payment enabler 170 is retrieved from the user database 324 in step 818. The payor 110 may be given an opportunity to change the default pay-in handler 160 for this transaction or for all further transactions. Presuming there are no changes, the default handler 160 is

interfaced in step 820 to transfer the money. If there is no stored value fund for the payee 130, a temporary fund is created in step 824. A temporary stored value fund can be used for a single transfer, but the payee may want to make the temporary fund permanent by opening an account with the payment enabler 170.

5                Regardless of whether new money is added or whether existing money is used, processing continues to step 828 from both step 812 and step 824. The money is attributed to the payees 130 stored value fund to the detriment of the payor's stored value fund in step 828. In other embodiments, the money is transferred directly from the payor's handler 160 to the stored value fund of the payee 130. In some embodiments, the  
10            payor can select a future time that payment is made such that the payment is configured now, but completed at the future time.

Referring next to FIGS. 9A and 9B, a flow diagram of an embodiment of a process 560 for moving money out of a stored value fund of a user is shown. This embodiment allows paying-out money in at least five different ways, namely, by: pick-up  
15            at an agent location 125, exchanging with some promotion, a credit to a debit or credit card, a credit to a bank account, and mailing a negotiable instrument. The depicted portion of the process 560 begins in step 904 where the default pay-out handler information is retrieved for the payee 130. In step 908, a web page is presented that allows the payee 130 to select a different handler 160 or to change information for the  
20            handler 160.

A user may have a number of currencies of money in their stored value fund. The user may select some or all of the different currencies for paying out. In many cases, the handler 160 only accepts money in a single currency or the user may simply wish to exchange money to another currency. In step 910, the currency is exchanged.  
25            The exchange rate database 332 is queried for the current rate that is applied by the payment conversion function 328.

In step 912, processing branches in one of five directions depending on the type of handler the user has chosen. The first two directions are depicted on FIG. 9A and the remainder are depicted on FIG. 9B. One branch beginning in step 916 corresponds to  
30            the user visiting an agent location 125 to transfer out money with the assistance of the agent. In step 916, the user selects an agent location 125 that is convenient. The user visits the agent location 125 in step 924 to either use a kiosk interface 180-2 or use the agent. In this embodiment, the user interfaces with the agent who uses the agent interface 180-4 to the payment enabler 170. From the agent interface 180-4, the agent can transfer

the money to any handler 160, can print a negotiable instrument or can provide cash to the user. The transfer is recorded by the payment enabler 170 in step 932.

In another branch that begins in step 936, a promotion program is chosen as the handler 160-1. Either the promotion handler 160-1 or the exchange rate database 332 can be queried in step 936 to determine the exchange rate for program credits or points. In step 940, the conversion rate is presented to the user for approval. Presuming the rate is approved, the promotion credits or points are purchased in step 944 by interfacing with the promotion handler 160-1. The payout of money to the promotion handler 160-1 is recorded in step 932.

In yet another branch that begins in step 948 of FIG. 9B, a credit card or debit card is used to transfer out money from the system 100. In step 948, a credit message is formulated for the card bank. In some embodiments, the identity of the card holder may be further verified by entry of a PIN or other verification method. The card bank is contacted in step 952 for authorization of the credit. Authorization of the credit is performed in step 956. The payout is recorded with the payment enabler 170 in step 932.

In the branch labeled "B," a bank transfer is used to payout money from the system 100. In step 960, an EFT message is formulated for the handler bank 160-4. The EFT message is sent to the handler bank 160-4 in step 964. Receipt of the EFT message is confirmed by the handler interface 308 in step 968 and the transfer is recorded in step 932.

In the branch of FIG. 9B labeled "C," a negotiable instrument is printed and sent to the user. In step 972, the user enters the delivery address and a name to pay the negotiable instrument to. The user can send the negotiable instrument to herself or a third party. A delivery method for sending the negotiable instrument is chosen in step 976. In step 980, the negotiable instrument is printed or otherwise produced and sent. The payout is recorded in the user database in step 932.

With reference to FIG. 10, a flow diagram of an embodiment of a process 1000 for automating future transfers is shown that uses the online money transfer system 100. In some circumstances, a user may want to automate the payout or payin of money from or to her stored value fund. There are two types of automated transfers, namely, threshold and fixed transfers. Threshold transfers aim to maintain a specified amount of money in the stored value fund such that money is either transferred in or transferred out to maintain that specified amount. Fixed transfers pay-in or pay-out a fixed money amount according to specified frequency.



The depicted portion of the process 1000 begins in step 1004 where the user selects a handler 160 for the automated transfer. In step 1008, the type of automated transfer is selected. For a threshold transfer, the user enters the threshold amount in step 1012 as a trigger condition. For a fixed amount transfer, the user enters the amount of the transfer in step 1016. Once the type of transfer is chosen, the direction of the transfer is selected in step 1020 such that money is automatically added or removed from the stored value fund.

A frequency for the automatic transfers is chosen in step 1024. For fixed transfers, the fixed amount is transferred at that frequency such that the period expiring is the trigger condition. For example, \$50 could be transferred into the stored value fund weekly. For the threshold transfers, the transfer threshold is tested at the specified frequency. For example, once a day any balance in excess of \$1,000 is transferred out of the stored value fund. In step 1032, a test is performed for the frequency period expiring. When the period expires, money may be transferred in or out of the stored value fund in step 1036. After any transfer, processing loops back to step 1032.

Some embodiments could notify the user when an automated transfer occurs. Although the embodiment of FIG. 10 only describes a single automated transfer, other embodiments could allow multiple automated transfers having various types and transfer periods. Further, some embodiments could transfer amounts over/under the threshold amount whenever overage/underage occurs without waiting for the transfer period to expire.

Referring next to FIGS. 11A and 11B, a flow diagram of an embodiment of a process 1100 for subscribing to automated transfers is shown. Under certain circumstances, a user may wish to pay for recurring charges or a future transfer with her stored value fund. If a vendor site accepts subscriptions, the user can configure payment in this way. In this embodiment, there are three different types of subscriptions, namely: a recurring and fixed amount is transferred, a fixed amount is transferred whenever requested and a variable amount is transferred when requested so long as it does not exceed a limit. Other embodiments could arrange other subscription transfers between a user and a vendor.

The depicted portion of the process 1100 begins in step 1104 where the user is prompted by the vendor site to allow payout through the payment enabler 170. If the user does not want to pay with her stored value fund as determined in step 1108, the vendor site may provide other payment options in step 1112. Presuming the user wants to

payout from the stored value fund in step 1108, processing proceeds to step 556 where an account is opened for the user in step 512, if necessary.

So long as an account is open for the user, processing continues from either step 556 or step 512 to step 1116 where the subscription type is selected by the vendor and presented to the user. In some embodiments, the user may be presented with a couple of subscription choices that can be selected.

There are three branches from step 1116 for the three transfer options, namely, a recurring and fixed transfer amount is selected in step 1120, a fixed transfer amount is transferred whenever requested by the vendor in step 1128, or a capped, variable, amount is transferred whenever requested in step 1124. The fixed, on-demand, payment in step 1120 can have its period limited by the user such that only a number of payments is available in a period, such as once a month. The capped, variable, amount branch of step 1124 could be further limited such that only a maximum amount is allowed for a period of time.

Once the vendor chooses a subscription type, it is presented to the user in step 1132. The user authorizes the automatic transfers in step 1136. In step 1140, the payment enabler waits for an automatic transfer. In this embodiment, the vendor initiates the transfer, however, some embodiments could have the payment enabler 170 contact the vendor at a defined frequency for fixed or variable payments. For example, a ten dollar fee could be paid every business day to the vendor without solicitation.

Where an automatic transfer is requested by the vendor, that request is check by the payment enabler 170 in step 1144 before fulfillment. The user can put frequency and/or amount limitations on transfers to the requesting vendor. If an attempt to violate the limit is detected, the vendor and/or the user is notified. The user may adjust the limits in view of the attempt to exceed the limit.

An electronic notification is sent to the user of the transfer when accepted by the payment enabler 170. The user can specify whether these notifications are sent or under which circumstances they should be sent. For example, the notification could include vendor information, a description of the goods and an amount for transfer. For a period of time, the transfer is pending and can be canceled by the user. In step 1152, the user can cancel the transfer, whereafter, the vendor site is notified in step 1156 and the subscription may be canceled or suspended by the vendor in step 1160. If the transfer is not canceled during pendency, the money is transferred to the stored value fund of the

user in step 1164. In some embodiments, the money is transferred directly to the handler  
160 pre-specified by the payee so as to skip-over the stored value fund of the user.

5 A number of variations and modifications of the invention can also be  
used. For example, when sending a printed check to a payee a telegram or greeting card  
can be enclosed therewith. Additionally, an electronic greeting card sent to the payee  
could include a payment notification. The payment notification would include a link to  
the payment enabler such that the payee could easily retrieve the money from the system.

10 While the principles of the invention have been described above in  
connection with specific apparatuses and methods, it is to be clearly understood that this  
description is made only by way of example and not as limitation on the scope of the  
invention.